A Database for the Medical Public-Domain Software: D-MePS

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Dating from 1987, at the SCAMC® meetings some public domain softwares were available. If one may be willing to use a software from the public-domain medical software, he will experience the weakness of existing classification and services. The huge quantity of so far available software (about 100 different diskettes, more than 150 softwares for a total amount of about 40 Mbytes) calls for a classification schema. We developed the schema. It includes description, classification and evaluation data (Fig. 1). Description reports on software name, author and hardware and software requirements. Classification mainly reports on software category, application domain, data format and target users. Evaluation includes both external quality factors (reliability, correctness, robustness, usefulness, efficiency, etc.) and internal quality factors (maintainability, expendability, interoperability, etc.). Evaluation is the most critical step. We performed evaluation also by employing

students from a master course in computer science - medical informatics. While descriptions and classifications are quite independent from the observer (e.g. most observers would classify a given software the same way), evaluations of external qualities but especially of internal ones strongly depend on the criteria of the evaluator himself. The high quantity of information collected has then been stored into D-MePS (Database for the Medical Public-Domain Software), which is a database we developed by means of Paradox™: the database sizes about 430 kbytes. By D-MePS one can immediately select all the softwares according to the entries of the schema: it can be done by the Query By Example language provided by Paradox™. For instance he can find all the softwares running on a certain platform (e.g. PC) and/or considering a certain category (e.g. decision aid) and/or having a certain application domain (e.g. nephrology). and/or having a certain reliability (e.g. which has been rated as good).

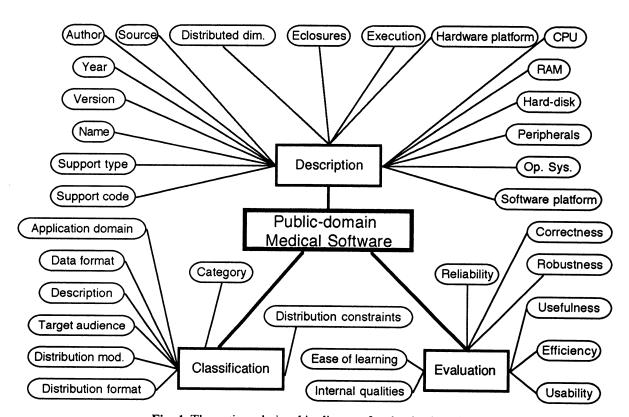


Fig. 1. The entity-relationship diagram for the database in D-MePS.